



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/030,667

06/05/2002

Ari Lakaniemi

4925-203PUS

5654

27799

7590

06/08/2005

COHEN, PONTANI, LIEBERMAN & PAVANE
551 FIFTH AVENUE
SUITE 1210
NEW YORK, NY 10176

EXAMINER

HARPER, V PAUL

ART UNIT

PAPER NUMBER

2654

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/030,667	Applicant(s) LAKANIEMI, ARI	
	Examiner V. Paul Harper	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/10/2002</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

U.S. National Stage Application

1. Acknowledgement is made of the indication that the present application is filed under 35 U.S.C. 371, of the indication that the required form PCT/DO/EO/903 is present, and of the use of transmittal form PCT/DO/EO/1390. Thus, the present application is being treated as a filing under 35 U.S.C. 371.

Information Disclosure Statement

Preliminary Amendment

2. The examiner acknowledges the fact the preliminary amendment (submitted on 06/05/2002) is used in the following rejection.

Information Disclosure Statement

3. The Examiner has considered the references listed in the Information Disclosure Statement dated 01/10/2002. A copy of the Information Disclosure Statement is attached to this office action.

Claim Objections

4. Claim 1 objected to because of the following informalities:

In claim 1, on lines 9 and 11 the word "recording" should be replaced by –recoding--.

Line 6 "the data parameters received (101)" with –data parameters received (101)—

Art Unit: 2654

Line 8 "the original data" with --original data--

Line 12 "the data parameters to be transmitted (107)" with --data parameters to be transmitted--"

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Lehtimaki (Patent Application Publication WO 96/32823).

Regarding **claim 1**, Lehtimaki teaches the use of transcoders during speech encoding and decoding in a telecommunication system (p. 1, Field of the Invention).

Lehtimaki's teachings include the following:

- in that the signal path the signals transmitted by the transmitter are made suitable for the receiver(p. 4, lines 5-15, transcoders carry out normal transcoders operations and can be connected in tandem; Fig. 1, where the transcoders are labeled TRCUx are indicated in the path between the various transmitters and receivers) so that

Art Unit: 2654

- for a data frame, at least one information parameter containing at least two content identifies is formed of the data parameters received (Fig. 4, **INFORMATION BITS**, **SID**, etc; p. 14, lines 1-3),
- data corresponding to the original data is synthesized from the original data parameters of the received frames (Fig. 4, **DECODER**; p. 4, lines 11-18, into normal digital pulse code modulated samples; p. 22, lines 1-11; Fig. 5),
- the synthesized data is transmitted for recoding with an encoding method suitable for the receiver (p. 4, lines 14-16, forwarded to a second transcoder and encoded therein; Fig. 7, item 73),
- during recoding, the data parameters of at least some frames are updated on the basis of at least one value of said content identifiers of the information parameter (p. 26, line 30 through p. 27, lines 10, Fig. 7, item 74, supplementary handling, **SID**) and
- on the basis of the value of at least one other content identifier of the information parameter, the frames to be transmitted to the receiver are selected from all recoded data frames (p. 26, line 30 through p. 27 line 10, Fig. 7, item 74, **SP**).

Regarding **claim 2**, Lehtimaki teaches everything claimed, as applied above (see claim 1). In addition, Lehtimaki teaches “that the data parameters of the frames to be updated are data parameters that describe background noise” (p. 11, line 35 through p. 12, line 35, a **SID** frame contains information on background noise)

Regarding **claim 4**, Lehtimaki teaches everything claimed, as applied above (see claim 1). In addition, Lehtimaki teaches "the value of at least one other of said content identifiers of the information parameter comprises information about the contents of the frame" (Fig. 4, **INFORMATION BITS**, **SID**, etc).

Regarding **claim 5**, Lehtimaki teaches the use of transcoders during speech encoding and decoding in a telecommunication system (p. 1, Field of the Invention).

Lehtimaki's teachings include the following:

- means by which at least one information parameter containing at least two content identifiers is formed for a data frame of the data parameters received (Fig. 4, **INFORMATION BITS**, **SID**, etc; p. 14, lines 1-3),
- means by which synthesized data corresponding to the original contents of the data is formed of the data parameters of the received frames (Fig. 4, **DECODER**; p. 4, lines 11-18, into normal digital pulse code modulated samples; p. 22, lines 1-11; Fig. 5),
- means (311) for recoding the synthesized data with an encoding method suitable for the receiver (p. 4, lines 14-16, forwarded to a second transcoder and encoded therein; Fig. 7, item 73),
- means (311) for updating the data parameters of at least some frames on the basis of at least one value of the content identifiers of said information parameter (p. 26, line 30 through p. 27, lines 10, Fig. 7, item 74, supplementary handling, **SID**) and

Art Unit: 2654

- means (312) for selecting the frames to be transmitted to the receiver on the basis of at least one other value of the content identifiers of the information parameter from all the recoded data frames (p. 26, line 30 through p. 27 line 10, Fig. 7, item 74, SP).

Regarding **claim 6**, Lehtimaki teaches everything claimed, as applied above (see claim 5). In addition, Lehtimaki teaches "that it is a Transcoder/Rate Adaptor Unit (TRAU)" (p. 9, lines 1-25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lehtimaki in view of Hakansson et al. (U.S. Patent Application Publication 2004/0062274), hereinafter referred to as Hakansson.

Regarding **claim 3**, Lehtimaki teaches everything claimed, as applied above (see claim 1). But Lehtimaki does not specifically teach "that the value of at least one of said content identifiers of the information parameter comprises information about the first

Art Unit: 2654

frame after a hangover period." However, the examiner contends that this concept was well known in the art, as taught by Hakansson.

In the same field of endeavor, Hakansson discloses efficient in-band signaling for discontinuous transmission and configuration changes in adaptive multi-rate communications systems. Hakansson further teaches the signaling of the first SID pattern (SID_FIRST) which can include hangover (¶'s [0073] through [0075]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lethimaki by specifically providing the features, as taught by Hakansson, because it is well known in the art at the time of invention for the purpose of saving memory (Hakansson, ¶[0072]).

Citation of Pertinent Art

7. The following prior art made of record but not relied upon is considered pertinent to the applicant's disclosure:

- Tikka (U.S. Patent 6,542,501 B1) discloses speech transmission in a mobile communication network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Paul Harper whose telephone number is (571) 272-7605. The examiner can normally be reached on M-F.

Art Unit: 2654

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

05/17/2005

V. Paul Harper
Patent Examiner
Art Unit 2654

A handwritten signature in black ink, appearing to read "V. Paul Harper", is written over the printed name and title.